

Determination of levels of radioactivity in NORM lantern mantles sold in Mexico

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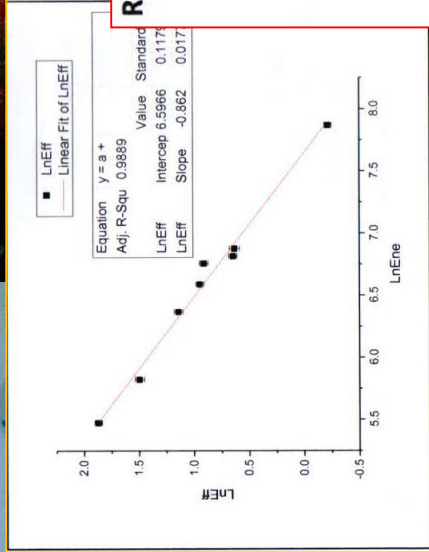




INSTRUCCIONES:

- 1) PROCURE USAR LA LAMPARA EN UN AREA SIEMPRE VENTILADA. MANTENGA EL CAPUCHON A UNA DISTANCIA SEGURA.
- 2) NO SE PEEJE AL ALCANCE DE LOS NIÑOS - LA CENIZA PODRIA SER INGERIDA.
- 3) NO EXPONGA EL CAPUCHON O LA CENIZA AL CONTACTO DIRECTO CON LA PIEL POR PERIODOS PROLONGADOS. DEPOSITE LA CENIZA EN LA BASURA.
- 4) LAVASE LAS MANOS DESPUES DE HABER MANIPULADO EL CAPUCHON Y LA CENIZA.

IMPURTADOR
 GIMBEL MEXICANA, S.A. DE C.V.
 PHOL MUJERE N° 45 COL
 AMPLIACION GRANADA
 DEL MIGUEL HIDALGO, CP. 11529.



Radionucleido	E(KeV)	(%)	Error
Th-232	63.8	13.00	1.49
Pb-212	238.6	6.58	0.20
Ac-228	338.3	4.67	0.16
Tl-208	583.2	3.07	0.09
Bi-212	727.3	2.55	0.09
Tl-208	860.6	2.3	
Ac-228	911.2	1.9	
Ac-228	969.0	1.8	
Tl-208	2614.5	0.8	



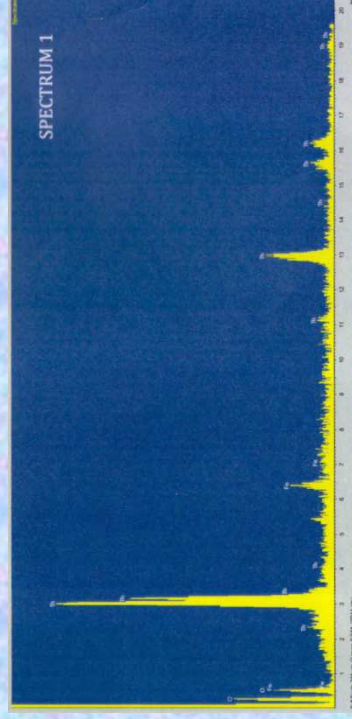
2016 Rio
norm VIII

CHALLENGES AND SOLUTIONS



2016 Rio
norm VIII

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Sample code	²³² Th	²²⁸ Ra	²²⁸ Th	²³⁰ Th
GMx1	500 (24)	310 (6)	249 (10)	62 (3)
GMx2	554 (15)	224 (6)	259 (14)	90 (5)
GMx3	683 (22)	320 (5)	260 (15)	85 (3)
GMx4	665 (26)	345 (4)	277 (15)	97 (5)
GMx5	641 (29)	343 (8)	275 (15)	77 (4)
GMx6	482 (20)	302 (7)	240 (18)	71 (4)
GMEs1	MDA	MDA	MDA	MDA
GMEs2	1.37 (0.01)	1.0 (0.1)	0.9 (0.1)	0.41 (0.01)
GMEs3	MDA	MDA	MDA	MDA

Sample	Description	²³² Th	²²⁸ Ra	²²⁸ Th	²³⁰ Th
A-MxFS	Ashes of gas mantles collected in Mexican late night food stands	1.12 (0.04)	0.38 (0.05)	0.97 (0.1)	0.22 (0.01)
A-GMx6	Ashes of sampleGMx6	1071 (72)	2014 (47)	1585 (37)	118 (11)
A-GMEs1	Ashes of sampleGMEs1	MDA	MDA	MDA	MDA